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# MONTHLY LETTER OF THE BUREAU OF ENTOMOLOGY UNITED STATES DEPARTMENT OF AGRICULTURE

Number 107

March, 1923.

#### TRUCK-CROP INSECT INVESTIGATIONS

F. H. Chittenden, Entomologist in Charge



Neale F. Howard reports that a study of the Mexican bean beetle in the Birmingham, Ala., district shows that only about 14 per cent as many beetles were found in hibernation this winter as were found a year ago, indicating that a lighter infestation in the field is certain to occur, at least early in the season. About Chattanooga, Tenn., however, from six to eight times as many beetles were found per unit of area as were found in Birmingham, indicating that a much heavier infestation in that district is to be expected. These results were anticipated by field observations during the late summer and fall. The infestation at Birmingham decreased greatly during this period, while at Chattanooga the infestation was very severe, and beans were generally destroyed, with the result that the price of snap beans and lima beans reached unusual levels on local markets.

A progress report on the research investigations of the Mexican bean beetle for the years 1921 and 1922 is under preparation at the Birmingham laboratory, and will soon be available for publication.

A map has been prepared showing the distribution of the Mexican bean beetle in the United States. With the cooperation of State entomologists and entomological agencies in the infested States, in addition to the scouting done by the bureau, it has been possible to make this map quite complete. A rapid spread to the north is shown and if the beetle continues to spread as it has in the past two years, it will reach Indiana, Ohio, and West Virginia this year.

The Thomasville, Ga., substation has been discontinued on account of the light infestation of the bean beetle during the past season, and the fact that available funds no longer permit the maintenance of this station.

Cooperative work with growers in Tennessee, who suffered severe losses from the Mexican bean beetle last season, is planned. Methods of control which have given best results for the past two seasons will be tested.

John E. Dudley, Jr., in charge of the bureau's field station at Madison, Wis., attended the regional conference of entomologists at Urbana, Ill., March 2 and 3. Twenty-five entomologists were in attendance, representing the six States of Ohio, Indiana, Illinois, Missouri, Kansas, and Wisconsin. Interesting and instructive discussions were held relating

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to the more important insect enemies of fruits, grains, and truck crops of the States represented. This is the second conference of its kind held, and it was voted to continue such meetings in the future for the interesting and profitable discussion of common problems.

Neale F. Howard has been visiting Washington for a conference with regard to the control of the Mexican bean beetle in the Southeastern States. He will return to his station at Birmingham, Ala., at the end of the month.

#### BEE CULTURE INVESTIGATIONS

#### E. F. Phillips, Apiculturist in Charge

A conference was held at the New National Museum Building, Washington, D. C., on March 12 for a consideration of the regulations for which provision is made in the law passed last August for the regulation of importations of honeybees. Several prominent beekeepers were in attandance. At the conference a suggested set of regulations were submitted as desirable.

- E. F. Phillips will deliver one of the Ludwick Lectures of the Philadelphia Academy of Natural Sciences on the evening of April 2, on "Bees and Beekeeping," to be illustrated with the two motion-picture reels made by the department.
- A. E. Lundie, a graduate student of Cornell, from the Union of South Africa, who has spent most of the last eighteen months at the Bee-Culture Laboratory, has returned to Cornell to present himself for examination for the degree of Doctor of Philosophy. He prepared his thesis while in Washington.

#### FRUIT INSECT INVESTIGATIONS

### A. L. Quaintance, Entomologist in Charge

- Dr. H. L. Dozier, in charge of the camphor scale project at New Orleans, La., has resigned from the bureau to accept a position with the Gulf Coast Citrus Exchange, Mobile, Ala. Dr. Dozier will be succeeded by Harold K. Plank.
- O. I. Snapp, in charge of peach insect investigations at Fort Valley, Ga., states that the first adult plum curculio of the 1923 season was taken while jarring peach trees on the morning of March 5, near Fort Valley. The beetles are late in appearing from hibernation this year on account of the cool weather delaying the blooming of the trees. Crawlers of the

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if the cool warfact delaying the blocking of the trees. Ore-lars of the

San Jose scale have been collected from peach trees near Fort Valley, Ga., each month during the past winter. This shows that during some seasons in the latitude of middle Georgia some of the scale insects may pass the winter in the full-grown stage.

- H. S. Adair, a graduate of the Mississippi A. & M. College, has been appointed field assistant and reported for duty at the Fort Valley, Ga., laboratory on March 1, to assist with the plum curculio studies that are being conducted there.
- A. J. Ackerman, in charge of apple insect investigations at Bentonville, Ark., and Prof. Geo. A. Dean, of the Kansas Agricultural College, met with fruit grovers of the Arkansas Valley at Wichita, Kans., recently to discuss methods of aiding grovers in the Wichita section in their fight against the codling moth during the coming season. Plans were made for cooperative work in the orchards at Wichita and at Belle Plain, Kans.

Fred E. Brooks, in charge of the French Creek, W. Va., station, cummunicates the interesting observation that beetles of the lesser chestnut weevil, Balaninus algonquinus, are perpetually present on the trees during the growing season, the adults of one generation maturing in the ground before those of the preceding generation have ceased oviposition on the trees. The life history of the larger chestnut weevil, Balaninus proboscideus Fab., is entirely different, the beetles being present only for about two or three months in late summer and autumn.

For several years workers in this branch have been accumulating data on <u>Conotrachelus anaglypticus</u> Say, as found associated with <u>C</u>.

nenuphar Hbst., on plum and peach trees. At the French Creek field station the species has been studied as a borer during its larval stage in the cambium of fruit and other kinds of trees. All the data are now being assembled in a manuscript to be submitted for publication this spring.

Dr. B. R. Porter attended the regional conference of entomologists at Urbana, Ill., on March 2, in connection with cooperative fruit-insect investigations under way in Indiana, and in that general region.

### GIPSY MOTH AND BROWN-TAIL MOTH INVESTIGATIONS

### A. F. Burgess, Entomologist in Charge

H. L. McIntyre, who has been associated with the gipsy moth and brown-tail moth investigations in the Bureau of Entomology for more than sixteen years, has accepted a position with the State of New York Conservation Commission. Mr. McIntyre will take charge of the work against the gipsy moth in that State, an appropriation of \$150,000 having been made by the Legislature for that purpose recently.

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The severe winter and deep snows have interfered considerably with the field work carried on by the Bureau of Entomology against the gipsy moth, particularly in New England. Scouting has been particularly difficult on account of snow conditions and it has been necessary, in order to cover certain sections of the territory, to equip the scouts with snow-shoes.

#### CEREAL AND FORAGE INSECT INVESTIGATIONS

#### W. R. Walton, Entomologist in Charge

Philip Luginbill and W. J. Phillips, of the bureau field stations at Columbia, S. C., and Charlottesville, Va., respectively, visited the Washington office during the first part of March for the purpose of discussing the season's plan for the corn earworm investigations to be conducted in Virginia and South Carolina. Mr. Luginbill remained in Washington for about 10 days in order to finish a manuscript for a technical bulletin on the fall armyworm.

- W. H. Larrimer, of the West La Fayette, Ind., station and Stewart Lockwood of the Billings, Mont., grasshopper station, will accompany C. L. Fluke, assistant entomologist of Wisconsin, to Door County of that State during April to determine the severity of the grasshopper infestation in that locality and, if necessary, plan an investigation as a basis for control.
- W. R. Walton, in charge of Cereal and Forage Insect Investigations, and Stewart Lockwood, in charge of the Billings, Mont., Station, will visit Winnipeg, Manitoba, on April 18 and 19 to attend a meeting of the International Northwestern Committee on Insect Pests. While in Winnipeg, Mr. Walton will deliver an address before the Natural History Society of Manitoba on "Some phases of insect parasitism."

#### STORED-PRODUCT INSECT INVESTIGATIONS

#### E. A. Back, Entomologist in Charge

The Sunday, March 11, Farm and Tractor Section of the Los Angeles Times published an interesting article on bean weevils, entitled "Shall California Continue to Grow Beans for Hungry Bugs?", by A. O. Larson.

- J. C. Bridwell, formerly with the bureau, has left Washington for New York City. Address Greer School, Huntington, Long Island, N. Y.
- Dr. Back spent several days in New York early in January in connection with the so-called mothproofing process for fabrics now so

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### CENTER AND PORMER DESECT PHYSICIS

# W. E. Dalvon, Estonologist in Charge

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extensively advertised in the fabric trade by the Process Chemicals, Incorporated, of New York City. The Process Chemicals is claimed to be a reorganization of the old Moth Proof Products Corporation. The process, having arsenic as a basis for its effectiveness, is called "Larvex."

Perez Simmons has submitted for publication a professional paper entitled "The Cheese Skipper as a Pest on Cured Meats." The manuscript contains 125 pages and many new data and fills a real need.

- A. O. Larson gave an illustrated address on bean weevils before the bean growers of Chino, Calif., on March 20.
- C. K. Fisher, a graduate of the Virginia Polytechnic Institute, has been appointed junior entomologist, effective March 1, and has been assigned to Alhambra, Calif., where he will assist A. O. Larson.
- Dr. Back recently spent a day at the Navy Supply Base at Brooklyn, N. Y., at the request of the Navy. A heavy infestation by clothes moths in shoe brushes, caps, flags, and paint brushes was the cause this time for cooperation between the bureau and the Navy.
- Prof. C. V. Piper, on his recent trip to the Canal Zone, collected leguminous material from which bruchids are being reared by Miss Marion Van Horn.

Dr. Back spent the second week of March in southern Georgia and Florida with S. E. McClendon and E. A. Vaughan, who are engaged in corn weevil investigations.

#### LIBRARY

#### Mabel Colcord, Librarian

#### New Books

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- Chile, Estacion de patolojia vejetal. Funjicidas e insecticidas mas usados para combatir las enfermedades de las plantas. 6.ed.

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- Elliott, E. A. Monograph of the hymenopterous family Stephanidae. <u>In</u>
  Proc. Zool. Soc. London, 1922, pt. 3, p. 705-831, illus. Sept., 1922.
- List of serials currently received in the Library of the U. S. Department of Agriculture exclusive of U. S. Government publications and publications of the State agricultural colleges and experiment stations... arranged by title, by subject and by region. January 1, 1922. Washington, Government Printing Office, 1922. 358 p. (U. S. Dept. of Agr. Dept. Circular No. 187.)

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- Palmer, Ray,&
- Westell, W.P. Pests of the garden and orchard, farm and forest... London, H. Drane (pref. 1922) 413 p., illus., 47 pl. "References to authorities consulted," p. 399.
- Pettey, F. W. How the fruit grower may more effectively control codling moth. 11 p. (Reprint No. 42. From the Journal of the Dept. of Agr. Union of South Africa, October, 1921.)
- Pillers, A. W. Noel. Notes on mange, and allied mites for veterinarians.

  London, Bailliere, Tindall and Cox, 1921,110 p. illus.
- Punjab Department of Agriculture. Veterinary Bulletins. 1921.

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- Roubaud, E., &

  Veillon, R. Recherches sur l'attraction des mouches communes par les
  substances de fermentation et de putrefaction. <u>In</u> Annales de
  l'Institut Pasteur, v. 36, no. 11, p. 752-764, tab. Dec., 1922.
- (U. S.) Treasury Department, Bureau of Public Health Service, Tularaemia Francis 1921, a new disease of man... Washington, Government Printing Office, 1922. 87 p., pl. (Hygienic Laboratory Bul, 130.)
- Vaud (Canton) Switz. Department de l'Agriculture, Industrie et du Commerce.

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